IN THE CLAIMS

1. (Currently Amended) A heatsink comprising:

a) a column having a heat receiving face, wherein a cross section of said column has one shape selected from trapezoid, triangle, and a shape whose sectional width decreases as it extends away ~~from~~ perpendicular to said heat receiving face, said heat receiving face having a protuberant heat conducting plate section at least one part thereon; and

b) a plurality of pillar-type protrusions provided on two faces ~~at least one face~~ other than the heat receiving face of said column in such a manner that they are at a predetermined oblique angle against the heat receiving face, said plurality of pillar-type protrusions being configured to form at least one uninterrupted fluid flow path between respective pillar-type protrusions in a direction in which the cross-sectional width of said column changes.

4. (Previously Presented) The heatsink of claim 1, wherein at least one of said pillar-type protrusions has protrusions and/or recesses on its surface.

5. (Previously Presented) The heatsink of claim 1, wherein the heat receiving face is spaced away from the nearest pillar-type protrusion(s).

6. (Previously Presented) The heatsink of claim 1, wherein the vertical distance to the heat receiving face from the end of each of said pillar-type protrusions on a column side is shorter than that from the other end.

7. (Previously Presented) The heatsink of claim 6, wherein the height of each of said pillar-type protrusions does not go beyond the height of said column.

8. (Previously Presented) The heatsink of claim 6, wherein at least one of said pillar-type protrusions has protrusions and/or recesses on its surface.

9. (Previously Presented) The heatsink of claim 6, wherein the heat receiving face is spaced away from the nearest pillar-type protrusion(s).

15. (Currently Amended) A cooling apparatus comprising:

a heatsink comprising:

a) a column having a heat receiving face, wherein a cross section of said column has a shape whose sectional width decreases as it extends away ~~from~~ perpendicular to said heat receiving face, said heat receiving face having a protuberant heat conducting plate section at least one part thereon; and

b) a plurality of pillar-type protrusions provided on two faces ~~at least one face~~ other than the heat receiving face of said column in such a manner that they are at a predetermined oblique angle against the heat receiving face, wherein at least one continuous row of said pillar-type protrusions extend from said column at the same angle relative to said column, each of said pillar-type protrusions in said at least one continuous row extending from said column at the same vertical height; and

a cooling means mounted on said heatsink to provide a fluid flow between said plurality of pillar-type protrusions in a direction transverse to said heat receiving face.

17. (Previously Presented) The cooling apparatus of claim 15, wherein the heat receiving face is spaced away from the nearest pillar-type protrusion(s).

19. (Original) The cooling apparatus of claim 15, wherein said cooling means in selected from one of an air blowing means, a Peltier element, a heat pipe and dipping in liquid.

20. (Original) The cooling apparatus of claim 19, wherein said air blowing means is disposed on the top face of said heatsink, facing the heat receiving face.

21. (Original) The cooling apparatus of claim 19, wherein said air blowing means is a fan which is mounted on the top face of said heatsink in such a manner that the fan sends wind to the heat receiving face.

23. (Previously Presented) The cooling apparatus of claim 15, wherein at least one of said pillar-type protrusions have protrusions and/or recesses on its surface.

25. (Previously Presented) The heatsink of claim 1, wherein the at least one face of said column forms a curve extending from the bottom of said column to the top of said column.

26. (Previously Presented) The heatsink of claim 1, wherein at least one continuous row of said pillar-type protrusions extend from said column at the same angle relative

to said column, each of said pillar-type protrusions in said at least one continuous row extending from said column at the same vertical height.

27. (Previously Presented) The heatsink of claim 1, further comprising a blower coupled to said column for blowing fluid in said direction in which the cross-sectional width of said column changes.

28. (Previously Presented) The heatsink of claim 1, wherein said respective pillar-type protrusions face each other.

29. (Currently Amended) A cooling apparatus, comprising:

a heatsink comprising:

a column having a heat receiving face and two side faces ~~at least one side face~~ which [[is]] are not parallel to said heat receiving face, said heat receiving face having a protuberant heat conducting plate section at least one part thereon; and

a plurality of fins provided on said two side faces ~~at least one side face~~ in such a manner that they are at a predetermined oblique angle against the heat receiving face; and

a blower coupled to said heat sink for forcing fluid through fluid flow passages defined between said plurality of fins.

30. (Currently Amended) A heatsink comprising:

a) a column having a heat receiving face, wherein a cross section of said column decreases at it extends away ~~from~~ perpendicular to said heat receiving face, said heat receiving face having a protuberant heat conducting plate section at least one part thereon; and

b) a first plurality of pillar-type protrusions formed by a plurality of first cut slits formed on a face other than the heat receiving face of said column, and a plurality of cross slits formed transversely to said first cut slits, said first plurality of pillar-type protrusions being formed at a predetermined oblique angle with respect to the heat receiving face and defining a first fluid flow section;

c) a second plurality of pillar-type protrusions formed by a plurality of second cut slits formed on another face of said column, and a plurality of second cross slits formed transversely to said second cut slits, said second plurality of pillar-type protrusions being formed at a predetermined oblique angle with respect to the heat receiving face and defining a second fluid flow section,

wherein said first fluid flow section is connected to said second fluid flow section.

31. (Previously Presented) The heatsink of claim 30, wherein the heat receiving face is spaced away from the nearest pillar-type protrusion.

32. (Currently Amended) A heatsink comprising:

a) a column having a heat receiving face, wherein a cross section of said column has a shape whose sectional width decreases as it extends away ~~from~~ perpendicular to said heat receiving face, said heat receiving face having a protuberant heat conducting plate section at least one part thereon; and

b) a plurality of pillar-type protrusions provided on two faces ~~at least one face~~ other than the heat receiving face of said column in such a manner that they are at a predetermined oblique angle against the heat receiving face, said plurality of pillar-type protrusions being configured to form at least one uninterrupted fluid flow path between respective pillar-type protrusions in a direction in which the cross-sectional width of said column changes, said at least one uninterrupted fluid flow path extending along said at least one face from said heat receiving face to the end of said column having a decreased sectional width.

33. (Currently Amended) A cooling apparatus comprising:

a heatsink comprising:

a) a column having a heat receiving face, wherein a cross section of said column has a shape whose sectional width decreases as it extends away ~~from~~ perpendicular to said heat receiving face, said heat receiving face having a protuberant heat conducting plate section at least one part thereon; and

b) a plurality of pillar-type protrusions provided on two faces ~~at least one face~~ other than the heat receiving face of said column in such a manner that they are at a predetermined oblique angle against the heat receiving face; and

a cooling means mounted on said heatsink to provide a fluid flow between said plurality of pillar-type protrusions in a direction transverse to said heat receiving face.

34. (New) The heatsink of claim 1, wherein the plurality of pillar-type protrusions provided on a row that is closest to said heat receiving face is formed parallel to said heat receiving face.

35. (New) The heatsink of claim 15, wherein the plurality of pillar-type protrusions provided on a row that is closest to said heat receiving face is formed parallel to said heat receiving face.